The 5th Nagoya University - UCLA International Symposium

Shinshu University and Nagoya University Global COE Joint Symposium in Ueda

Nagoya University Global COE Program
“Education and Research of Micro-Nano Mechatronics”

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Shinshu University Global COE Program
“International Center of Excellence on Fiber Engineering”
### Session 1  
**Chair: Dr. Tomohiro Kawahara, Nagoya University**

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<thead>
<tr>
<th>Time</th>
<th>Title</th>
<th>Speaker</th>
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<tbody>
<tr>
<td>9:10</td>
<td>&quot;Feedback System Control (FSC) Technique Based Optimization for Electrochemical BoNT Apatasensor&quot;</td>
<td>Prof. Chih-Ming Ho, UCLA</td>
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<td>9:30</td>
<td>&quot;Murine Model of Personalized Cell Therapy by iPS&quot;</td>
<td>Prof. Kennichi Isobe, Nagoya University</td>
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<td>9:50</td>
<td>&quot;Biomimetic Bone Regeneration&quot;</td>
<td>Prof. Ben Wu, UCLA</td>
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<td>10:10</td>
<td>&quot;Restoration of Skeletal Muscle Function - Transplantation of Embryonic Ventral Spinal Cord Cells into Distal Nerve Stump -&quot;</td>
<td>Prof. Goro Obinata, Nagoya University</td>
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<td>10:30</td>
<td>&quot;Micro-Nanomanipulations for Cell Analysis&quot;</td>
<td>Prof. Toshio Fukuda, Nagoya University</td>
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<td>10:50</td>
<td><strong>Break</strong></td>
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<td>11:05</td>
<td><strong>Session 2</strong></td>
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<td>11:05</td>
<td><strong>Chair: Dr. Carlos Rafael Tercero Villagran, Nagoya University</strong></td>
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<td>11:05</td>
<td>&quot;On-chip Robotics for Biomedical Device Innovations&quot;</td>
<td>Prof. Fumihito Arai, Nagoya University</td>
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<td>11:25</td>
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<td>&quot;Radiosynthesis on EWOD Platform for Positron Emission Tomography (PET)&quot;</td>
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<td>11:45</td>
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<td>&quot;Development of Arterial Stenosis Model to Study Pathologic Wall Mechanics&quot;</td>
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<td>12:05</td>
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<td>&quot;Human-Robot Interaction in Minimally Invasive Surgery&quot;</td>
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<td>&quot;Development of Page Turnig Machine with Single Sheet Separation Technique&quot;</td>
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<td>12:45</td>
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<td><strong>Lunch at Mulberry Hall (Campus Map #15)</strong></td>
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<td>13:40</td>
<td>Session 3</td>
<td><strong>Chair: Dr. Masashi Ikeuchi, Nagoya University</strong></td>
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<td>&quot;Soft Tapered Stencil Mask for Combinatorial Cluster Culture of Stem Cells&quot;</td>
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<td>13:55</td>
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<td>&quot;Development of Automatic Single Cell Dispenser&quot;</td>
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<td>&quot;Quantitative Analysis Parameters of Endovascular Surgery Simulation&quot;</td>
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<td>&quot;Bio-nano Composites with Polysaccharide Nanowhiskers&quot;</td>
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<td>14:40</td>
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<td>&quot;Novel Nanofibers from Cellulose and Chitosan&quot;</td>
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<td><strong>Break</strong></td>
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<td>15:15</td>
<td>Session 4</td>
<td><strong>Chair: Dr. Masashi Ikeuchi, Nagoya University</strong></td>
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<td>&quot;Dielectric Polymer Actuator for Artificial Muscle - From Soft Polymer Gel to Solid Polymer Film -&quot;</td>
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<td>15:35</td>
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<td>&quot;Nanoelectronic Devices from Nanowire Heterostructures&quot;</td>
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<td>&quot;Graphene as an Electrode Material for Supercapacitors&quot;</td>
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<td>16:15</td>
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<td>&quot;First-principles Study on Active Slip Systems in β-Sn&quot;</td>
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<td>&quot;Homogenized Elastic-Viscoplastic Simulation of Plate-Fin Structures Using a Duplex Model&quot;</td>
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<td><strong>Break</strong></td>
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<td>17:00</td>
<td>Student Session 1</td>
<td><strong>Chair: Masahiro Kojima, Nagoya University</strong></td>
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<td>&quot;Pattern Formation of Vascular Stem Cells&quot;</td>
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<td>&quot;Construction of Semi-closed Single Cell Analysis System and Its Application&quot;</td>
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**Agenda**

**Student Session 1**
Chair: Daisuke Yajima, Nagoya University

- "Establishment of Induced Pluripotent Stem (iPS) Cells from Aged Bone Marrow (BM) - Derived Myeloid Cells"
  Zhao Cheng, Nagoya University

- "Fabrication of Regenerated Silk Fibroin Nanofibrous Composite Scaffolds and Their Application in Tissue Engineering"
  Wei Kai, Shinshu University

- "Release of Macromolecular Model Drugs from Biodegradable Poly(lactic-co-glycolic acid) Emulsion Electrospun Fibrous Mats"
  Li Yuan, Shinshu University

**Transportation (Shinshu University >> Tokyu Inn)**

**Student Session 2**
Chair: Daisuke Yajima, Nagoya University

- "Optimization of Lipid Production by B. braunii"
  Leyla Sabet, UCLA

- "Building of an ATP Production System Using Photosynthetic Proteins"
  Takamitsu Ueki, Shinshu University

- "Incubated Protein Reduction and Digestion on an EWOD Digital Microfluidic Chip for MALDI-MS"
  Nelson Wyatt, UCLA

- "Dynamic Observation of Nanometer-thick Liquid Films with High-resolution Ellipsometric Microscope"
  Yosuke Kajihara, Nagoya University

**Transportation (Tokyu Inn >> Shinshu University)**

**Student Session 3**
Chair: Ryosuke Tane, Nagoya University

- "Role of Oxide Nanosheets in Electrocatalyst of Polymer Membrane Fuel Cells"
  Takahiro Saida, Shinshu University

- "Biomimetic Morphology-control of Pt Nanocatalyst"
  Li Yujing, UCLA

- "Microfabricated 3D Flexible Tactile Sensor for Robotic Applications"
  Jeong Il Lee, Nagoya University

- "Mechanism Design Method for Micro Manipulators"
  Shoichiro Kamada, Nagoya University

- "Control Strategy for Walking Assist Suit Using Neural Oscillators"
  Zhang Xia, Shinshu University

**Transportation (Tokyu Inn >> Shinshu University)**
"Closing Remarks"
Prof. Toshio Fukuda, Nagoya University

12:00  Lunch at Mulberry Hall (Campus Map #15)

13:00  Campus Tour (Campus Map #16 & 26)

14:00  Excursion

17:00  Symposium Adjourns

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**Poster Session**
during Break & Lunch Time, August 26 - 28th

1. "The Preparation and Characterization of Hierarchical Borosilicate Glass Nanofibers"
   Chunxia Gao, Shinshu University

2. "Carboxymethyl Chitosan/ Hydroxyapatite Composite Nonwoven as Bone Regeneration Scaffold"
   Xuxu BAO, Shinshu University

3. "Study on Cell Wall Lytic Enzyme SLT70 Family in Bacillus Subtilis"
   I Putu Sudiarta, Shinshu University

4. "Construction of Conductive Polymer Channels"
   Jian Zhou, Shinshu University

5. "Effects of a Polymer on the Aggregation behavior of Acid Dyes in Inkjet Ink for Textiles"
   Ju-Young Park, Shinshu University

6. "Reconstitution of Biological Clock into Microdroplet"
   Dr. Masaru Kojima, Nagoya University

7. "Numerical Simulation for brain aneurysm"
   Masahiro Kojima, Nagoya University

8. "Electrospraying Biodegradable Nano-Meshed Microcapsules and Developing a Cell Culture Scaffold"
   Ryosuke Tane, Nagoya University

9. "Development of Optimized Two-Segment Type Hydraulic Active Catheter"
   Daisuke Yajima, Nagoya University

10. "Electrical Stimulations of Tactile Sensory Feedback for Dexterous Handling with Artificial Hands"
    Dr. Chikara Nagai, Nagoya University

    Dr. Yosuke Tsukiyama, Nagoya University

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For Poster Presenters
Your posters must be in place by 20:00 on August 26th (Thu.). Please take your posters down until 13:00 on August 28th (Sat.). Otherwise the posters will be removed by the secretariat.
Research Center for Advanced Science and Technology
7F Invited Lectures, Oral Presentation, Poster Presentation, Welcome Party
2F Campus Tour; Beyond Fibers

Welfare Facilities (Mulberry Hall)
Lunch

Faculty of Textile Science and Technology Resource Center
Campus Tour
1. At JR/Shinano Rail Way Ueda Station, take Joden Bus. "East Course". Get off at Aeon Ueda Shopping Center Mae. Walk for 5 mins to campus.

2. At JR/Shinano Rail Way Ueda Station, take Chikuma Bus for Kakeyu Onsen, Komoro Eki or Maruko. Get off at Shoei Mae. Walk for 5 minutes to campus.

3. At JR/Shinano Rail Way Ueda Station, take JR Bus Kanto for Nagakubo/Iridaimon. Get off at Aeon Ueda Shopping Center mae. Walk for 5 minutes to campus.

On foot 20 mins walk from Ueda station.
Ueda Tokyu Inn
4-24-1, Tenjin, Ueda-shi, Nagano; 386-0025
Tel (81) 268-24-0109
Fax (81) 268-24-0114

• Access
  In front of JR Ueda Station (Onsen Exit)
  Nearest interchange: 10 minutes from Ueda Sugadaira exit on the Joshinetsu Expressway

• Sightseeing Information
  Ueda Castle (10 minutes by walk)
  Bessho Onsen Spa (25 minutes by train)
  Visit Historical sites in Sioda-Daira Plan (by train, bus, or sightseeing bus)

• Convenience stores nearby
  Lawson (3 minutes by walk)
  Circle K (8 minutes by walk)